

AMENDMENTS TO THE CLAIMS

Claims 1-27 (Canceled)

Claim 28 (New): A glazing panel having dimensions of at least 40 cm by 30 cm and comprising

a first glass sheet having a thickness in a range of from 1.5 mm to 14 mm;

a second glass sheet, spaced from the first glass sheet and having a thickness in a range of from 1.5 mm to 14 mm; and

an interlayer adhered between the first glass sheet and the second glass sheet so as to form a laminated assembly, wherein

the interlayer is a polyvinyl butyral (PVB) based material; and

the interlayer has a maximum heat release rate of less than 650 kW/m².

Claim 29 (New): The glazing panel according to Claim 28, wherein the glazing panel further comprises

a third glass sheet having a thickness in a range of from 1.5 mm to 14 mm and spaced from the second glass sheet; and

an intumescent layer positioned between the second and the third glass sheets.

Claim 30 (New): The glazing panel according to Claim 28, wherein
the laminated assembly comprises at least three substrates adhered together by means
of interlayers; and
the glazing panel has a fire rating of at least EI30 and a bullet resistance of at least
class BR3 according to European standard EN1063.

Claim 31 (New): The glazing panel according to Claim 28, wherein the glazing panel
is characterized by at least one selected from the group consisting of:

a) the glazing panel comprises a structure first glass sheet / interlayer / second glass
sheet / solar control coating layer / spacing / infra red reflecting layer / third glass sheet with
each of the first glass sheet, the second glass sheet and the third glass sheet having a thickness
in a range of from 3 mm to 7 mm, where the third glass sheet has a surface compression at a
central portion of at least 80 MPa;

b) the glazing panel comprises a structure first glass sheet / interlayer / second glass
sheet / solar control coating layer / spacing / third glass sheet with each of the first glass
sheet, the second glass sheet and the third glass sheet having a thickness in a range of from 3
mm to 7 mm, where the third glass sheet has a surface compression at a central portion of at
least 80 MPa; and

c) the glazing panel comprises a structure infra red reflecting layer / first glass sheet /
interlayer / second glass sheet / spacing / solar control coating layer / third glass sheet with
each of the first glass sheet, the second glass sheet and the third glass sheet having a thickness
in a range of from 3 mm to 7 mm, where the third glass sheet has a surface compression at a
central portion of at least 80 MPa.

Claim 32 (New): The glazing panel according to Claim 28, having a fire rating of at least EW30 and a mechanical resistance of at least 2B2 in a pendulum test according to European standard EN12600, wherein the glazing panel is characterized by at least one selected from the group consisting of:

a) the glazing panel comprises a structure first glass sheet / interlayer / second glass sheet, the first glass sheet having a thickness in a range of from 1.5 mm to 4.5 mm, the first glass sheet being selected from the group consisting of glass having an expansion coefficient less than or equal to 9×10^{-6} and glass having a Tg greater than or equal to 580°C, the second glass sheet having a thickness in a range of from 1.5 mm to 4.5 mm, the second glass sheet being selected from the group consisting of soda lime glass, glass having an expansion coefficient less than or equal to 9×10^{-6} and glass having a Tg greater than or equal to 580°C; and

b) the glazing panel comprises a structure first glass sheet / interlayer / second glass sheet, the first glass sheet being a first, non-wired glass sheet having a thickness in a range of from 1.5 mm to 2.5 mm, the second glass sheet being a second, non-wired glass sheet having a thickness in a range of from 1.5 mm to 2.5 mm, the second, non-wired glass sheet being spaced from the first, non-wired glass sheet, the interlayer adhered between the first, non-wired glass sheet and the second, non-wired glass sheet so as to form the laminated assembly, and a third, non-wired glass sheet having a thickness in a range of from 1.5 mm to 2.5 mm spaced from the second glass sheet by an intervening, intumescent layer.

Claim 33 (New): The glazing panel according to claim 28, wherein the glazing panel is characterized by at least one selected from the group consisting of:

a) the glazing panel has a fire rating of at least EW30 and comprises a structure first glass sheet / interlayer / second glass sheet / intumescent layer / third glass sheet with each of the first glass sheet, the second glass sheet and the third glass sheet having a thickness in a range of from 1.5 mm to 4 mm

b) the glazing panel has a fire rating of at least EW60 and comprises a structure first glass sheet / interlayer / second glass sheet / intumescent layer / third glass sheet with each of the first glass sheet, the second glass sheet and the third glass sheet having a thickness in a range of from 2.5 mm to 4.5 mm;

c) the glazing panel has a fire rating of at least EW60 and comprises a structure first glass sheet / interlayer / second glass sheet / intumescent layer / third glass sheet / interlayer / fourth glass sheet with each of the first glass sheet, the second glass sheet, the third glass sheet and the fourth glass sheet having a thickness in a range of from 1.5 mm to 4.5 mm;

d) the glazing panel has a fire rating of at least EI90 and comprises a structure glass sheet / intumescent layer / glass sheet / intumescent layer / glass sheet / intumescent layer / glass sheet / interlayer / glass sheet / intumescent layer / glass sheet / intumescent layer / glass sheet / intumescent layer / glass sheet with each of the glass sheets having a thickness in a range of from 1.5 mm to 4.5 mm;

e) the glazing panel has a fire rating of at least EI120 and comprises a structure glass sheet / intumescent layer / glass sheet / intumescent layer / glass sheet / intumescent layer / glass sheet / interlayer / glass sheet / intumescent layer / glass sheet / intumescent layer / glass sheet / intumescent layer / glass sheet / interlayer / glass sheet / intumescent layer / glass sheet / intumescent layer / glass sheet with each of the glass sheets having a thickness in a range of from 1.5 mm to 4.5 mm;

f) the glazing panel has a fire rating of at least E30 and comprises a structure glass sheet / interlayer / glass sheet / sealed gas filled separation / glass sheet / intumescent layer / glass sheet with each of the glass sheets having a thickness in arrange of from 2.5 mm to 3.5 mm;

g) the glazing panel has a fire rating of at least E30 and comprises a structure glass sheet having a thickness in a range of from 2.5 mm to 4.5 mm / interlayer / glass sheet having a thickness in a range of from 3.5 mm to 4.5 mm / low emissivity coating / sealed gas filled separation / glass sheet having a thickness in a range of from 2.5 mm to 3.5 mm / intumescent layer / glass sheet having a thickness in a range of from 2.5 mm to 3.5 mm; and

h) the glazing panel has a fire rating of at least E30 and comprises a structure glass sheet having a thickness in a range of from 5.5 mm to 6.5 mm / low emissivity coating / interlayer / glass sheet having a thickness in a range of from 2.5 mm to 3.5 mm / sealed gas filled separation / glass sheet having a thickness in a range of from 2.5 mm to 3.5 mm / intumescent layer / glass sheet having a thickness in a range of from 2.5 mm to 3.5 mm.

Claim 34 (New): The glazing panel according to Claim 29, wherein the intumescent layer comprises silica (SiO_2) and sodium oxide (Na_2O); and a ratio R_p of $\text{SiO}_2/\text{Na}_2\text{O}$ by weight is greater than 3.3.

Claim 35 (New): The glazing panel according to Claim 33, wherein each intumescent layer comprises silica (SiO_2) and sodium oxide (Na_2O); and a ratio R_p of $\text{SiO}_2/\text{Na}_2\text{O}$ by weight is greater than 3.3.

Claim 36 (New): The glazing panel according to Claim 34, wherein a water content of the intumescent layer is less than or equal to 22% by weight.

Claim 37 (New): The glazing panel according to Claim 35, wherein a water content of each intumescent layer is less than or equal to 22% by weight.

Claim 38 (New): The glazing panel according to Claim 28, wherein at least one of the first glass sheet and the second glass sheet is selected from the group consisting of glass having an expansion coefficient less than or equal to 9×10^{-6} and glass having a Tg greater than or equal to 580°C.

Claim 39 (New): The glazing panel according to Claim 28, wherein the interlayer has a maximum heat release rate of less than 500 kW/m².

Claim 40 (New): The glazing panel according to Claim 28, wherein the glazing panel has a mechanical resistance rating of at least 2B2 in a pendulum test according to European standard EN12600.

Claim 41 (New): The glazing panel according to Claim 28, wherein the glazing panel has a light transmission greater than or equal to 60 % and a solar factor less than or equal to 55 %.

Claim 42 (New): The glazing panel according to Claim 34, wherein the intumescent layer has a thickness of less than or equal to 2 mm.

Claim 43 (New): The glazing panel according to Claim 35, wherein each intumescent layer has a thickness of less than or equal to 2 mm.

Claim 44 (New): The glazing panel according to Claim 36, wherein the intumescent layer has a thickness of less than or equal to 2 mm.

Claim 45 (New): The glazing panel according to Claim 37, wherein each intumescent layer has a thickness of less than or equal to 2 mm.